

North Dakota's Information Technology Department



Policy & Planning Division

Large Project Oversight Overview

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Legislative Directive

NDCC 54-35-15.2.10 authorizes the Information Technology Committee to "...receive and review information, including a project startup report summarizing the project description, project objectives, business need or problem, cost-benefit analysis, and project risks and a project closeout report summarizing the project objectives achieved, project budget and schedule variances, and lessons learned, from the information technology department and the affected agency regarding any major information technology project of an executive branch agency.." It also states that the committee shall "Perform periodic reviews to ensure that a major information technology project is on its projected schedule and within its cost projections."

NDCC 54-35-15.2.11 provides similar authority regarding a "major project of the state board of higher education or any institution under the control of the state board of higher education if the project:

- (1) Significantly impacts the statewide wide area network, including the campus access routers;
- (2) Impacts the statewide library system; or
- (3) Is an administrative project. An administrative project is a project that directly collects, aggregates, modifies, stores, or reports institutional student, financial, or human resources records or data and is provided primarily for administrative purposes."

NDCC 54-54-59.7 requires the Information Technology Department to "...request and review information, including project startup information summarizing the project description, project objectives, business need or problem, cost-benefit analysis, and project risks and a project closeout information summarizing the project objectives achieved, project budget and schedule variances, and lessons learned, regarding any major information technology project of an executive branch agency, the state board of higher education, or any institution under the control of the state board of higher education as provided in section 54-35-15.2. The department shall present the information to the information technology committee on request of the committee.

NDCC 54-54-59.8 allows the Information Technology Department to "...request and review information regarding any information technology project of an executive branch agency with a total cost of between one hundred thousand and two hundred fifty thousand dollars as determined necessary by the department. The department shall present the information to the information technology committee on request of the committee.

NDCC 54-54-59.23 requires the identified entities to report to the State Information Technology Advisory Committee (SITAC) according to the guidelines developed by ITD (STD 009-05). In addition, the entities must also "notify the state information technology advisory committee if:

- (1) At a project milestone, the amount expended on project costs exceeds the planned budget for that milestone by twenty percent or more; or
- (2) At a project milestone, the project schedule extends beyond the planned schedule to attain that milestone by twenty percent or more."

The report must specify corrective measures being undertaken to address any cost or time of completion issue. If the agency has not taken adequate corrective measures within ninety days after the report, the agency shall submit a report to the legislative council's information technology committee regarding the project.

Entities are also notify SITAC upon completion of the project if the allowable variances are exceeded.

The EPMO team in ITD's Policy & Planning division performs the oversight activities.

Overview of the Process

This section of the document is intended to provide a brief overview of the Large Project Oversight process. ITD Standard [STD009-05](#) defines the oversight requirements for large projects. It can also be found as [Appendix A](#). [Appendix B](#) provides a timeline of the processes.

In general, a major project is a project with a cost of two hundred fifty thousand dollars or more. We will call these projects Large Projects (LPs) for the rest of this manual

There are five primary deliverables in regards to LP oversight:

Initiation/Planning

As noted in the North Dakota Project Management Guidebook, proper initiation and planning are critical to the success of a project. There are three primary documents during the initiation and planning phase.

Reminder: Sometimes the planning phase of a LP is a large project in its own right.

Business Case

The planning and budgeting processes should have created this document. The business case provides the reason for performing the project. Many times the agency may reduce the primary reason down to meeting a mandated regulation. You can find additional information and a template in the [ND Project Management Guidebook](#).

ITD Standard [STD009-05](#) requires the agency to present the business case to the LPO Analyst for independent review.

The LPO Analyst reviews the document to ensure the agency is following project management best practices. Key items looked for are:

- Project description
- Project objectives
- Business need/problem, proposed solution
- Consistency/fit with the organization's mission
- Cost/benefit analysis
- Project risks

The LPO analyst can provide feedback to the agency regarding the business case. Once the agency is satisfied that the business case is complete and has received management sign-off, they must submit the final version to the LPO analyst. The analyst can accept the business case as-is and forward it on to the Legislative Council, or they can forward the business case with comments if they feel it does not meet the expectations of LPO.

Project Charter

The project charter is the formal authorization to move forward with the project. Since this can occur months or even more than a year after the business case, the charter often provides a brief update to the business case to reflect any changes. A project charter should contain the following

- Project background
- Project scope
- Project objective(s)
- Critical success factors
- Required resources
- Constraints
- Assumptions
- Project authority

You can find additional information and a template in the [ND Project Management Guidebook](#).

Again, the agency must submit this document to the LPO Analyst for review and comment. The final version must be submitted to the LPO Analyst following sign-off.

Executive Steering Committee

At this point the agency should create an Executive Steering Committee. The LPO analyst should be included as an ex-officio member as a way to keep up to date on the progress of the project and to provide advice regarding project management processes if requested.

Project Plan

The agency should next create a project plan. The plan must follow the guidelines found in the Project Management Body of Knowledge (PMBOK) and/or the [ND Project Management Guidebook](#). As noted in standard [STD009-05](#), the project plan shall identify specific milestones throughout the project and their associated cost,

schedule, and deliverables. After executive sign-off, the agency must submit the plan to the LPO Analyst assigned to the LP. This plan will provide the basis for the analysis of budget, schedule, and overall project health. The agency shall submit a current copy of the project plan to ITD quarterly in conjunction with the quarterly project status report.

Project Start-up Report

After the project is planned and the budget and schedule is developed in detail, the agency should present a summary of the Business Case called the [Project Startup Report](#) to Information Technology Committee after ITD's review.

Quarterly Status Reports

The agency must submit a status report to the assigned LPO Analyst at the end of each calendar quarter or when a milestone exceeds twenty percent of planned cost or schedule. During the planning phase the agency should submit a simplified report called a [Planning Report](#). Once execution of the project has begun, the agency is required to submit an [Execution Report](#). The LPO Analyst reviews them and may request a meeting with the PM to clarify any questions. The LPO Analyst then develops the Summary Report discussed below.

Summary Status Report

This is the report presented to the Information Technology Committee on a quarterly basis. The LPO Analysts review and summarize the individual Quarterly Status Reports to create this report. The analyst enters the summaries entered on the Active LP spreadsheet. A sample of this report is in [Appendix C](#). The Analysts also develops a cover letter to the report with information about projects in the planning phase, projects that entered execution or closed in the last quarter, and details regarding any projects that require more explanation than allowed in the spreadsheet. The lead LPO Analyst sends the report & cover letter to the Legislative Council for forwarding to the Legislative IT Committee.

Post Implementation Review (PIR)

The last stage in the LPO process is the Post Implementation Review (PIR). After the completion of the LP, the agency must perform a post project review. You can find more details and additional information on what should be contained in a PIR in the [ND Project Management Guidebook](#). The LPO Analysts review this information for accuracy and content. Once accepted, the LPO Analyst forwards the document to the Legislative Council.

Project Close-out Report

Once the PIR is submitted to the Legislative Council, the agency should be prepared to present a summary of it called the [Project Closeout Report](#) to Information Technology Committee. This ends the LPO process for the agency.

Appendix A: ITD Standard STD009-05

NORTH DAKOTA ENTERPRISE PROJECT MANAGEMENT

STANDARD: STD009-05

EFFECTIVE: January 1, 2005

REVISION #: 2.0

REVISED: July 1, 2005

Project Management of Large Information Technology Projects

Purpose

This standard will ensure accountability for the resources allocated to large information technology (IT) projects as directed by the legislative mandates summarized below, and ensure that a consistent approach will be used to manage large IT projects.

The Interim Legislative Information Technology Committee (IT Committee) is required to:

- Review the cost-benefit analysis of any large IT project of an executive or judicial branch agency (NDCC 54-35-15.2).
- Perform periodic reviews to ensure that a large IT project is on its projected schedule and within its cost projections. If the committee determines that the project is at risk of failing to achieve its intended results, the committee may recommend to the Office of Management and Budget (OMB) the suspension of the expenditure of moneys appropriated for a project or plan. OMB may suspend the expenditure authority if in agreement with the recommendation of the IT Committee (NDCC 54-35-15.3 and 54-59-23).

The State Information Technology Advisory Committee (SITAC) is required to:

- Perform periodic reviews to ensure that large IT projects are within acceptable schedule and cost variances. (NDCC 54-59-23).

The Information Technology Department is required to:

- Prepare and present an annual report to the IT Committee that contains a list of large projects started, ongoing, and completed during the year. Also required, is information regarding evaluations of cost-benefit analyses for completed projects, and a description of the benefits to the state resulting from its investment (NDCC 54-59-19.1.3.6).
- Develop statewide IT policies, standards, and guidelines with OMB, based on information from state agencies and institutions (NDCC 54-59-09).

The Legislative Council is provided assistance with the implementation of these mandates from the Information Technology Department Policy and Planning Division (ITD) and the State Auditor's Office.

Standard

All large information technology projects shall comply with the following directives:

1. A business case shall be developed to justify the business need for the project and to identify the *proposed solution*.
 - 1.1. The business case shall minimally include the *project description, project objectives, business need/problem, proposed solution, consistency/fit with the organization's mission, cost/benefit analysis, and project risks*. The business case should be developed and finalized during the origination and initiation processes. Additional information and a template can be found in the ND Project Management Guidebook (see Guidance section).

- 1.2. An initial business case shall be submitted to ITD prior to any pre-project expenditures (e.g. RFI/RFP development, etc.). As additional information is available, the business case will be updated.
- 1.3. ITD shall review the business case for general compliance with directive 1.1 and provide comments to the agency within ten business days of receipt.
- 1.4. Upon acceptance of the final version of the business case, ITD shall submit a copy to the Legislative Council
2. A project manager shall be assigned to the project to develop the project plan, manage its execution (including scope, schedule, cost, and quality control), and manage project human resources, communications, risks, and procurements.
3. A project charter shall be developed and executed to initiate the project and to secure commitment for the resources (human, financial, equipment, etc.) necessary for the project.
 - 3.1. The project charter shall minimally include the following information: project background, *project scope*, *project objective(s)*, *critical success factors*, *required resources*, *constraints*, *assumptions*, and *project authority*. The project charter shall be completed prior to the planning process. Additional information and a template can be found in the ND Project Management Guidebook (see Guidance section).
 - 3.2. The *project sponsor* shall formally approve the project charter in writing.
 - 3.3. A copy (electronic) of the project charter shall be submitted to ITD prior to any project expenditures or signing of vendor contracts.
 - 3.4. A signed copy of the project charter shall be retained by the agency.
4. An Executive Steering Committee shall be established to provide management support to the project.
 - 4.1. The committee members shall include at minimum, the project manager, project sponsor, and key stakeholders. The Policy and Planning Oversight Analyst assigned to the project shall be invited to attend as an ex officio member.
 - 4.2. The committee shall be responsible for reviewing the status at project milestones, authorizing significant changes to the project plan, and facilitating decision-making.
 - 4.3. The committee shall meet quarterly, or on a more frequent basis as defined in the project plan.
5. A project plan shall be developed as the primary planning document for the project.
 - 5.1. The project plan shall follow the guidelines of the Project Management Institute's (PMI) Project Management Body of Knowledge (PMBOK), and/or follow the guidelines of the ND Project Management Guidebook and Project Plan Template (see Guidance section).
 - 5.2. The project plan shall identify specific *milestones* throughout the project and their associated cost, schedule, and *deliverables*.
 - 5.3. After approval by the project sponsor, a copy of the project plan shall be submitted to ITD.
 - 5.4. A current copy of the project plan shall be submitted to ITD quarterly in conjunction with the quarterly project status report.
6. The project status report shall be submitted to ITD on a quarterly basis, or when a milestone exceeds twenty percent of planned cost or schedule. The report should include an executive summary, budget, schedule, issues, risks, project accomplishments and upcoming activities.
 - 6.1. Throughout the life of the project, if changes occur which would impact the project objectives as stated in the original business case, or changes to cost, schedule, scope

or quality as defined in the project plan, those impacts shall be included in the project status report.

6.2. The report shall include the attainment of any project milestones, and summary information to include (NDCC 54-59-23);

6.2.1. Any variance wherein the project costs exceed the planned costs for that milestone by a variance of twenty percent or more.

6.2.2. Any variance wherein the project schedule extends beyond the planned schedule for that milestone by a variance of twenty percent or more.

6.2.3. Specify corrective measures being undertaken to address any cost or time completion issue.

6.2.4. Both positive and negative cost and schedule variances for milestones accumulate for the duration of the project (See Guidance).

7. A project performance assessment, which evaluates the project status and performance of the project budget and schedule, shall be completed jointly by the project manager and the Policy and Planning Oversight Analyst at least once per quarter.

8. ITD shall create a Large Project Summary Report, which summarizes the performance of large projects, and submit it to the Legislative Council once per quarter.

9. A Post Implementation Review (PIR) shall be performed by the agency at the conclusion of the project in order to assess the success of the project and to capture historical information.

9.1. The PIR shall minimally include a review and summary of lessons learned, project effectiveness, CSSQ management, risk management, communications management, acceptance management, organizational change management, issues management, project implementation and transition, performance of the performing organization, and key project metrics (i.e. cost, schedule, scope, quality). Additional information and templates can be found in the Project Closeout Chapter of the ND Project Management Guidebook (see Guidance section).

9.2. A copy of the PIR shall be submitted to ITD.

9.3. Upon acceptance, ITD shall submit a copy of the PIR to the Legislative Council.

Policy

Projects are by definition a temporary endeavor undertaken to create a unique product or service. Due to the nature and scale of the projects defined as large IT projects, it is critical that project management practices be employed and that processes are in place, increasing the probability of delivering quality products, on time and within budget.

Applicability

According to NDCC 54-35-15.2, this standard applies to all executive and judicial branch agencies, including any major project of the State Board of Higher Education if the project meets the following criteria:

- a) Significantly impacts the statewide area network, including the campus access routers;
- b) Impacts the statewide library system; or
- c) Is an administrative project. An administrative project is a project that directly collects, aggregates, modifies, stores or reports institutional student, financial, or human resources records or data and is provided primarily for administrative purposes.

The legislative branch is strongly encouraged to follow this standard but is not required to meet the directives within.

Definitions

1. *Assumptions* – A list of factors, for planning purposes, that are known to be true, real, or certain.
2. *Business Need/Problem* – Those issues identified as driving the proposed project.
3. *Consistency/Fit within the Organizations Mission* – How the proposed project will fit within the agency's mission and/or strategic plan.
4. *Constraints* – Any known factors that limit the project's execution.
5. *Cost/Benefit Analysis* – A dynamic review of the estimated cost, anticipated benefits, and a quantitative analysis justifying the costs for the anticipated benefits.
6. *Critical Success Factors* – Outcomes that must be achieved in order for the project to be considered a success. They should correlate with the Project Objectives.
7. *Deliverable* - The physical items to be delivered for a project. This may include organization attributes, reports and plans, as well as physical products or objects.
8. *Large Information Technology Project* – A large project is defined in NDCC 54-35-15.2 as follows: "a major project is a project with a cost of two hundred fifty thousand dollars or more in one biennium or a total cost of five hundred thousand dollars or more."
9. *Milestone* – A key or major event in a project based on planned work accomplishments rather than a fixed time interval. It has accomplishment criteria, assigned budget and schedule.
10. *Project Authority* – The levels of authority to the project (roles and responsibilities of the project team and the stakeholders)
11. *Project Description* – An initial review of the project objectives.
12. *Project Management* - The application of knowledge and tools to project activities to meet project requirements. Project management is accomplished through the use of the processes such as initiating, planning, executing, controlling, and closing.
13. *Project Objectives* – The purpose and expected outcomes of the project.
14. *Project Risks* – Any risk associated with the successful implementation of the project.
15. *Project Scope* – A brief description or bulleted list of what IS and IS NOT included in the scope of the project.
16. *Project Sponsor* – The manager(s) that provide the primary financial resources, human resources, and management support for the project.
17. *Proposed Solution* – The product of the project that would resolve the Business Need/Problem.
18. *Required Resources* – The individuals to be assigned to the project and whose participation must be approved by management.

Guidance

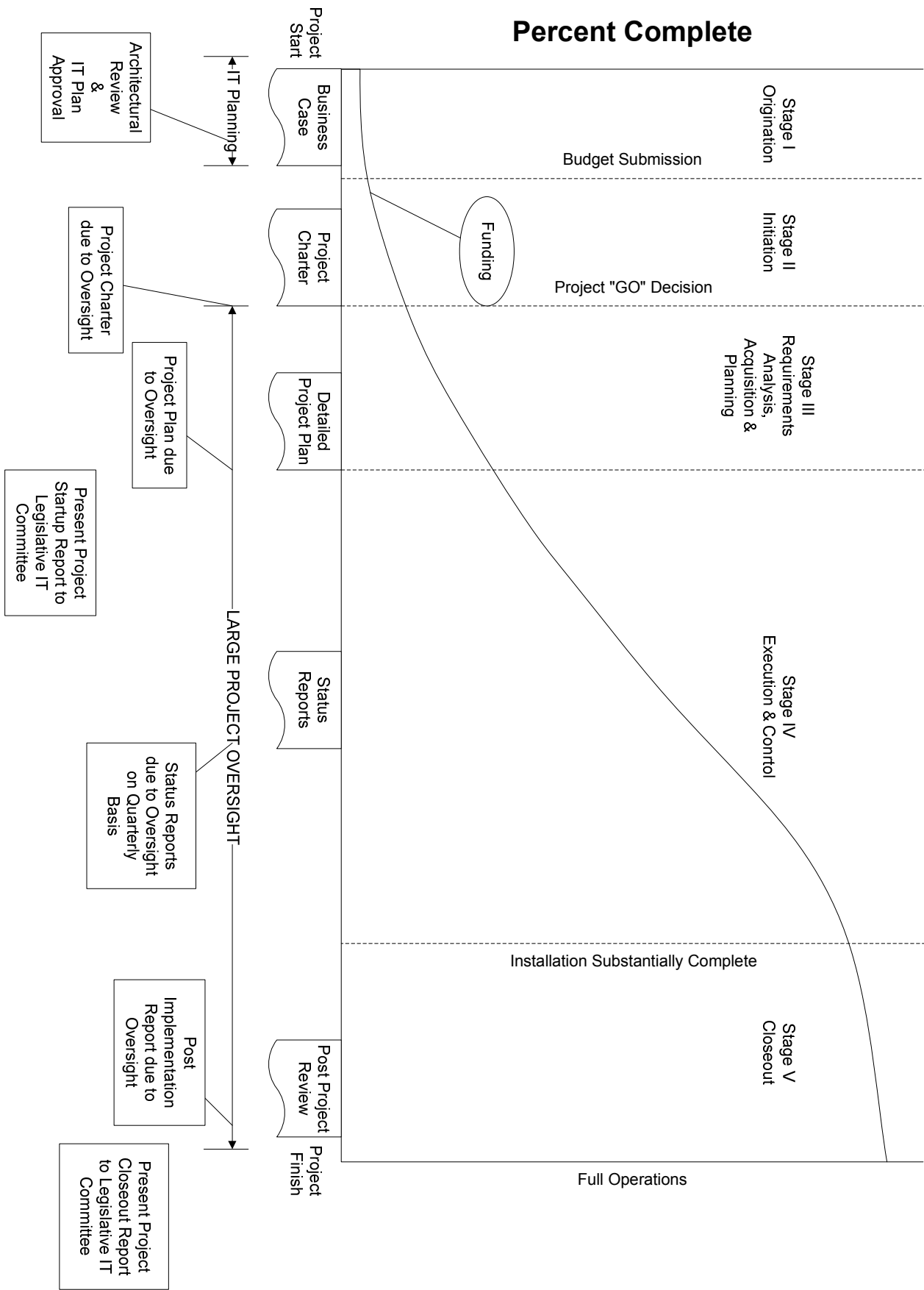
1. Enterprise Project Management Website <http://www.state.nd.us/epm>
2. ND Project Management Guidebook <http://www.state.nd.us/epm/resources/doc/guide.pdf>
3. The Project Management Body of Knowledge (PMBOK), Project Management Institute (PMI) <http://www.pmi.org>.

Non-Compliance

Non-compliance of this standard shall be reported to the State Auditor's Office and the Legislative Council. NDCC 54-35 and NDCC 54-10 identify the enforcement capabilities for each group respectively. Non-compliance may result in non-approval of any IT expenditures associated with the project.

This policy supersedes ITD Standard STD009-05 v1.0.

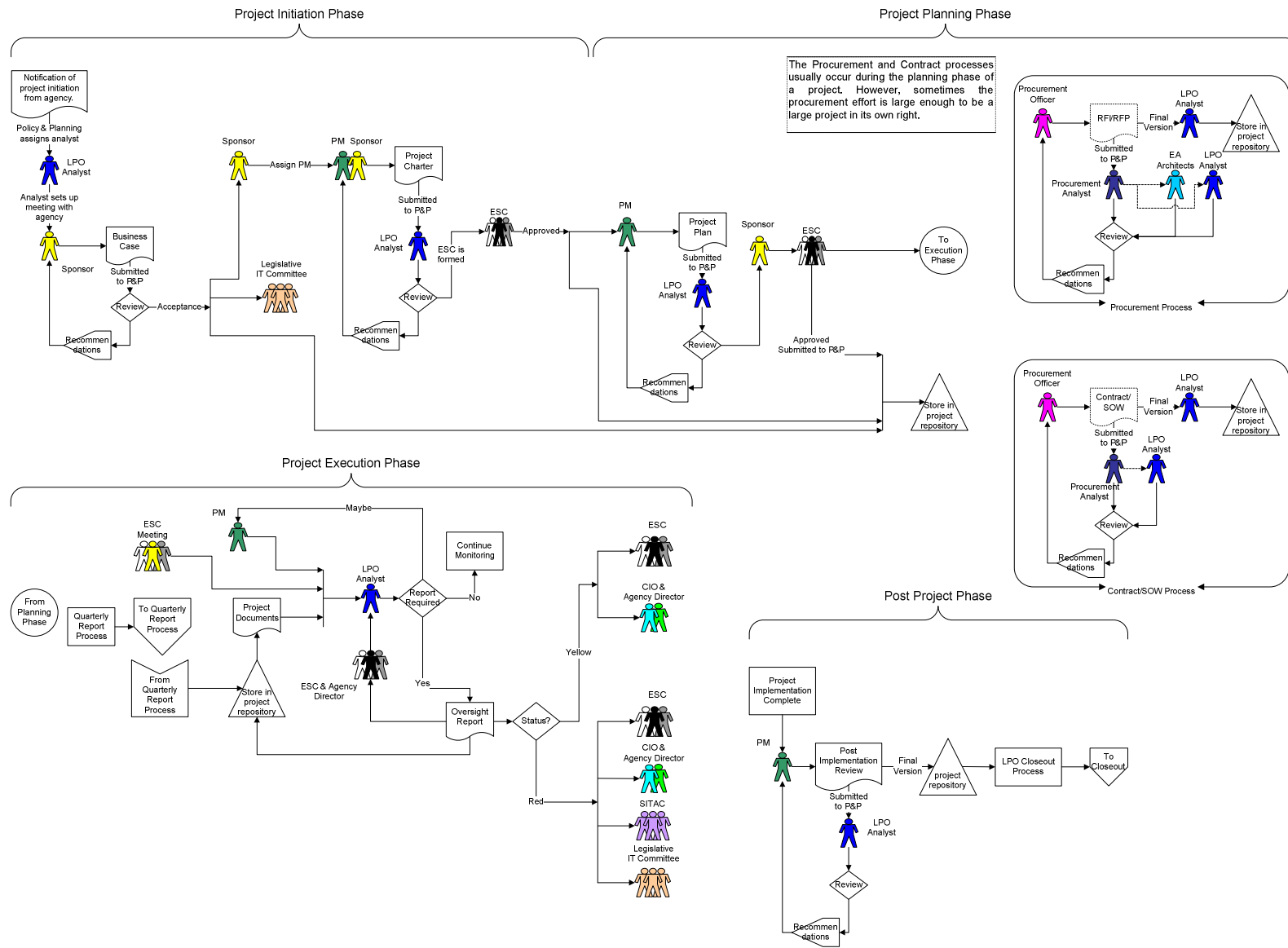
Appendix B: Life Cycle



Appendix C: Sample Summary Project Report

Agency	Project Name	Bus Case Review	Project Description	Project Duration	Project Status	Budget			Technology Requirements	Project Manager	Update Date	Post-Project Review Date
						Project budget	Actual to date	Est. cost at completion				
Bank of North Dakota	Cash Management	Y	Add web access and Positive Pay components to existing Cash Management System. These components provide for web delivery of account data and for positive pay/reconciliation applications for BND customers.	07/01 – 03/02	Hardware components being acquired. Fundtech will be on site for installation early Nov. The new servers will be put into production for current services (BND Direct Fax & BND Direct PC) while training and testing occur on other services. A pilot group of customers will test during Dec. Implementation of BND Direct Web to be in Jan/Feb dependant upon test results. Implementation of ReconStar will occur following the completion of BND Direct Web.	\$395,099	\$159,399	\$395,099		Phylis Lasher	11-Oct-01	
DOT	CARS - Construction Automated Record System	*	Replacement of the present CARS system. This is a DOS based system developed in 1985 which provides status information and generates payment information on highway construction projects. It requires an enormous amount of redundant data entry and has not kept abreast with the changes in technology. Additional FTE may be required in 03-05	07/99 - 03/05	Agency and ITD staff have completed the system analysis and preliminary data model . Management approved preliminary data model and revised project cost. The application of new development technology (Webshere Dev) by ITD has increased project cost. System development has begun. Project costs also include approximately \$220,000 in maintainance costs for 03-05.	\$1,147,707	\$32,126	\$1,147,707		Diane Gunsch	1-Oct-01	

Large Project Oversight Process



LPO Quarterly Report Process

